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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/659,219

09/10/2003

Andre Jeutter

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5692

7590

12/05/2006

SIEMENS CORPORATION
INTELLECTUAL PROPERTY DEPT.
170 WOOD AVENUE SOUTH
ISELIN, NJ 08830

EXAMINER

WONG, EDNA

ART UNIT

PAPER NUMBER

1753

DATE MAILED: 12/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/659,219

Applicant(s)

JEUTTER ET AL.

Examiner

Edna Wong

Art Unit

1753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

This is in response to the Amendment dated October 11, 2006. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Response to Arguments

Specification

The disclosure has been objected to because of minor informalities.

The objection of the disclosure has been withdrawn in view of Applicants' amendment.

Claim Rejections - 35 USC § 112

Claims 1-14 have been rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The rejection of claims 1-14 under 35 U.S.C. 112, second paragraph, has been withdrawn in view of Applicants' amendment.

Claim Rejections - 35 USC § 102

I. Claims 1-5 and 9-12 have been rejected under 35 U.S.C. 102(b) as being anticipated by **Kang et al.** (US Patent No. 5,800,695).

The rejection of claims 1-5 and 9-12 under 35 U.S.C. 102(b) as being anticipated

by Kang et al. has been withdrawn in view of Applicants' amendment.

II. Claim 13 is rejected under 35 U.S.C. 102(b) as being anticipated by **Kang et al.** (US Patent No. 5,800,695).

The rejection of claim 13 under 35 U.S.C. 102(b) as being anticipated by Kang et al. has been withdrawn in view of Applicants' amendment.

III. Claim 14 is rejected under 35 U.S.C. 102(b) as being anticipated by **Kang et al.** (US Patent No. 5,800,695).

The rejection of claim 14 under 35 U.S.C. 102(b) as being anticipated by Kang et al. has been withdrawn in view of Applicants' amendment.

Claim Rejections - 35 USC § 103

Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kang et al.** (US Patent No. 5,800,695) as applied to claims 1-5 and 9-12 above, and further in view of **JP 1-100302** ('302).

The rejection of claim 6-8 under 35 U.S.C. 103(a) as being unpatentable over Kang et al. as applied to claims 1-5 and 9-12 above, and further in view of JP 1-100302 ('302) has been withdrawn in view of Applicants' amendment.

Response to Amendment'

Specification

The disclosure is objected to because of the following informalities:

page 2, line 5, "Claim 1" should be deleted because it is improper for the specification to reference a claim.

page 2, line 5, it is unclear what is meant by "Claim 1 the claims".

Appropriate correction is required.

Claim Objections

Claims **10 and 16** are objected to because of the following informalities:

Claim 10

line 1, the word -- coating -- should be inserted after the word "the". See claim 1, lines 6-8.

Claim 16

line 2, the word -- coating -- should be inserted before the word "layer". See claim 1, lines 6-7.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

I. Claims **1-2 and 4-18** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 1

line 6, recites "a high energy beam".

line 7, recites "melting".

lines 7-9, recites "melting and homogenization of ... a region of the substrate directly below the irradiated near-surface region".

lines 9-11, recites "without melting and homogenizing a region of the substrate located laterally adjacent the melted and homogenized substrate region".

Claim 13

line 6, recites "a high energy beam".

line 7, recites "melting".

lines 7-9, recites "melting and homogenization of ... a region of the substrate directly below the irradiated near-surface region".

lines 9-11, recites "without melting and homogenizing a region of the substrate located laterally adjacent the melted and homogenized substrate region".

Claim 14

line 6, recites "a high energy beam".

line 7, recites "melting".

lines 7-9, recites "melting and homogenization of ... a region of the substrate directly below the irradiated near-surface region".

lines 9-11, recites "without melting and homogenizing a region of the substrate located laterally adjacent the melted and homogenized substrate region".

Claim 15

lines 1-2, recite "wherein the melted substrate is only partially melted in a local region of the irradiation".

Claim 16

lines 1-2, recite "wherein the near-surface region of the layer is scanned over a period of time by the high energy beam".

Applicants' specification does not convey with reasonably clarity to those skilled in the art the above claim limitations. Thus, they are new matter.

II. Claims **6-9, 13 and 15** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6

lines 1-2, it appears that "the surface" is the same as the near-surface region recited in claim 1, line 6. However, it is unclear if it is. If it is not, then what is the relationship between the surface and the near-surface region?

Claim 7

line 2, it appears that "the surface" is the same as the near-surface region recited in claim 1, line 6. However, it is unclear if it is. If it is not, then what is the relationship between the surface and the near-surface region?

Claim 8

line 2, it appears that "the surface" is the same as the near-surface region recited in claim 1, line 6. However, it is unclear if it is. If it is not, then what is the relationship between the surface and the near-surface region?

Claim 13

line 7, "the substrate" lacks antecedent basis. See also claim 13, lines 9 and 10.

Claim 15

line 1, "the melted substrate" lacks antecedent basis.

line 2, it appears that "in a local region" is the same as the region located directly below the irradiated near-surface region as recited in claim 1, line 8-9. However, it is unclear if it is. If it is not, then what is the relationship between the local region and the region located directly below the irradiated near-surface region?

Allowable Subject Matter

The following is a statement of reasons for the indication of allowable subject matter:

Claims **1-2, 4-12 and 15-18** define over the prior art of record because the prior art does not teach or suggest a method for coating a substrate having at least one hole,

comprising the steps of covering, applying and irradiating as presently claimed, esp., the step of irradiating by a high energy beam a near-surface region of the coating layer to improve adhesion of the coating layer to the substrate, and to ensure melting and homogenization of the coating layer and a region of the substrate located directly below the irradiated near-surface region without melting and homogenizing a region of the substrate located laterally adjacent the melted and homogenized substrate region.

Claim **13** defines over the prior art of record because the prior art does not teach or suggest a method for coating a turbine component having at least one hole, comprising the steps of covering, applying and irradiating as presently claimed, esp., the step of irradiating by a high energy beam a near-surface region of the coating layer to improve adhesion of the coating layer to the substrate, and to ensure melting and homogenization of the coating layer and a region of the substrate located directly below the irradiated near-surface region without melting and homogenizing a region of the substrate located laterally adjacent the melted and homogenized substrate region.

Claim **14** defines over the prior art of record because the prior art does not teach or suggest a method for recoating a substrate, which has already been used and having at least one hole, comprising the steps of covering, applying and irradiating as presently claimed, esp., the step of irradiating by a high energy beam a near-surface region of the coating layer to improve adhesion of the coating layer to the substrate, and to ensure melting and homogenization of the coating layer and a region of the substrate located directly below the irradiated near-surface region without melting and homogenizing a

region of the substrate located laterally adjacent the melted and homogenized substrate region.

The prior art does not contain any language that teaches or suggests the above. *JP 1-100302* does not teach without melting and homogenizing a region of the substrate located laterally adjacent the melted and homogenized substrate region. Therefore, a person skilled in the art would not have been motivated to adopt the above conditions, and a prima facie case of obviousness cannot be established.

Claims 1-2 and 4-18 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 1st paragraph, set forth in this Office action.

Claims 6-9, 13 and 15 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

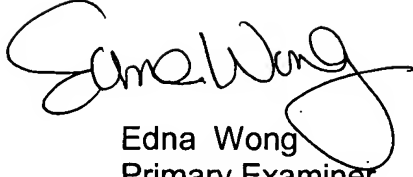
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edna Wong whose telephone number is (571) 272-1349. The examiner can normally be reached on Mon-Fri 7:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Edna Wong
Primary Examiner
Art Unit 1753

EW
December 3, 2006